



A This custom Makrolon enclosure is on a Dix 57 steel-hulled sailing sloop restored by friends over the past 18 years. They are currently aboard her in Grenada weathering COVID-19. Photo taken in Smiths Cove, Gloucester, Mass.

A right-hand zipper foot is a must when working with Makrolon®.

Track-to-track enclosure fabrication

By Mark Hood, MFC

At Hood Canvas, we fabricate rigid panels frequently. We have devised a method of fabricating these panels that is more mainstream than our usual method of fabrication where we face zippers to hide them. In this article, we will fabricate a pair of sample enclosure panels start to finish using Marine 5 Makrolon® and Stamoid Open®.

Photo 1 (See next page)

Here our pattern has been completed to finished size. For our sample pattern we are using blue Mylar® polyester film, but normally we use Tyvek®. We draw lines with a permanent marker as to where we want our fabric to attach to the Makrolon. At each end

of our lines, we punch holes so we can mark through them. When all pieces are attached, the panels should match our pattern exactly. The holes represent the edge of the Makrolon. The 3/4-inch cutback on the vertical edge will be added back in later steps using folded strips. This allows our vertical zipper to be installed between the edges of the Makrolon.

Photo 2 (See next page)

In this photo, we have placed the cut Makrolon onto our finished-size pattern. We have marked through the punched holes in our pattern onto the Makrolon for the top and bottom edges. The sides are marked in 3/4 inch from each vertical edge of the pattern.

TIPS ON SEWING MAKROLON®

- Needle coolers and diamond tri-point needles are a must.
- Use a longer stitch length along with additional foot pressure.
- Ensure slow and steady stitching with little or no stopping.
- Make sure there's no back-tacking or double stitch line when attaching pieces.
- Use start and stop stitching on Stamoid®, walking on and off Makrolon.

This is the cut size of our Makrolon. We cut the edges of the Makrolon masking back exactly ½ inch on all edges. A light touch using a new utility knife blade and ruler does the job nicely. This provides a crisp line to match the cut edge of our trimming. All trimming is overlaid exactly ½ inch onto the Makrolon's four sides, right to the edge of the new masking line. We round all the Makrolon corners with a sanding block and chamfer all edges with a deburring tool prior to assembly.

Photo 3

Our top and bottom pieces of Stamoid are laid out from our pattern two-ply. We mark through the punched holes, then add an extra ½ inch for attaching to the Makrolon. We like to leave a trim edge on all of a piece's tops, bottoms and sides. This allows for staples to be used in an area that will be cut off later. Fabric directionality is important; we always attach across the weft of the fabric for low stretch. Be sure to flip the bottom layer of Stamoid, as it has an inside and an outside. In this photo, we have not yet roller cut the attachment edges. This is the best way to ensure a straight cut on edges that will be seen.

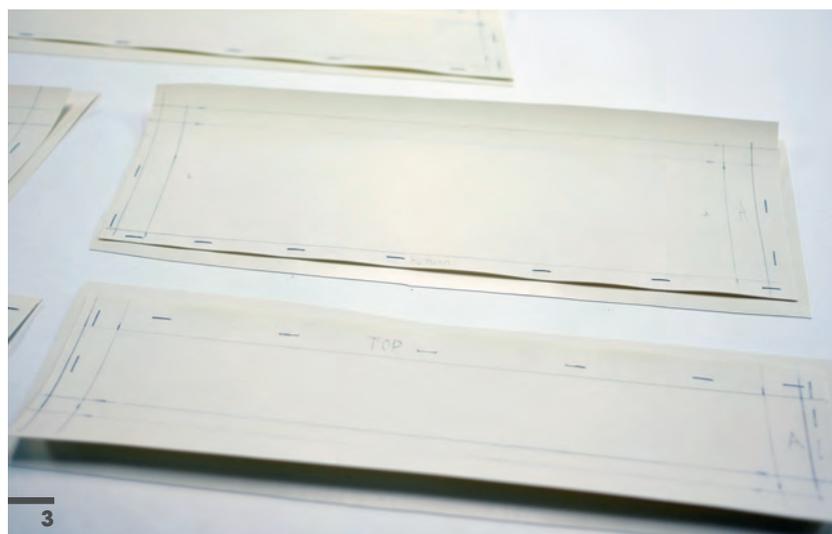
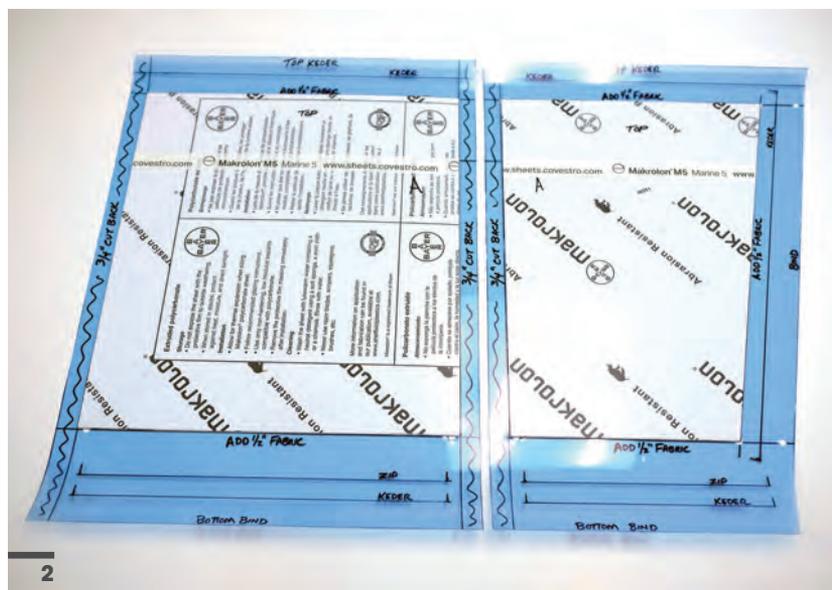
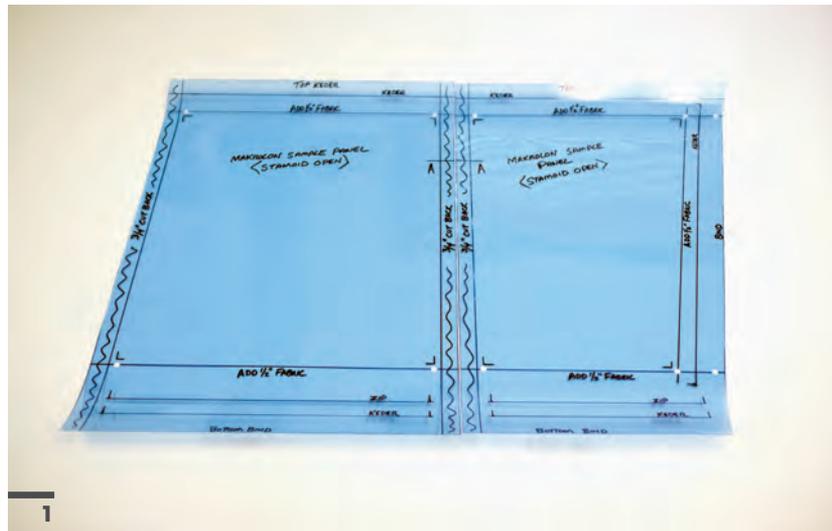




Photo 4

We are attaching our top and bottom pieces onto the Makrolon. The attachment edges with the 1/2 inch added have been roller cut through two layers. We use 1/8-inch low tack seam tape on both sides of the Makrolon. Apply the seam tape far away from the cut edge so it does not ooze out in the heat of summer. When attaching, align with care. We use weights on the Makrolon and pins on the trim edges to align exactly 1/2 inch onto the Makrolon in line with the paper backing previously cut back. Then we remove the seam tape backing and stick in place. We now sew right along our attachment edge to attach. Next, we staystitch just inside our cut lines on our Stamoid-attached pieces and cut off the trim edges along with our staples. In the photo, we are sticking the backside with an even, flat hand.



Photo 5

To cut our vertical strips, we use a width stick of 2 1/2 inches. We roller cut these edges to keep them super straight and aligned. These strips will be folded in half to finish 1 1/4 inches when applying. We cut across the weft of the Stamoid. We apply our 2 1/2-inch roller-cut strips to the vertical sides 1/2 inch onto the Makrolon, aligning with the edge of our masking. We use 1/8-inch seam tape on the outboard edge on both sides to hold it in place. In the photo, we have flipped the panel and are sticking the backside so the edges align with the outside and the masking. We stitch these strips onto the Makrolon on the inner edges. Additionally, the outside edges of these strips will be stitched. Binding needs to go onto the bottoms and one side. The extra 3/4 inch added to each vertical edge adds back what was needed in order to match our patterns exactly. The zippers will now be stitched between, but not directly onto, the Makrolon. At this point we preflight what we made against our pattern. They should match exactly.



Photo 6 (See previous page)

Use a right-hand zipper foot for this step—a must when working with Makrolon. In this photo we are stitching a vertical zip right next to, but not on top of, our Makrolon. This foot lets us sew along the edge of the Makrolon so the zipper is tight in and not actually walking on top of it—a big plus. We stick on our zippers leaving 1½ inches unsewn at the top edge for starting and sew right along the edge. On the outside, the top edge of our enclosure is left open to sandwich our keder cord at the top of the panels and then is sewn closed with a zipper foot. However, this is just one method we use. Alternatively, the top edge can be sewn closed and bound. Keder is then sewn on either the outside or inside, depending on the method. We then bind the edge of the keder before sewing it onto our panel at the top on either side.

Photo 7 (See previous page)

Here are the completed sample panels. We prefer to sew the top of the bottom zippers on first along the zipper line on our pattern. Then we sew the bottom half of the zipper to the keder afterward. We like to keep the keder continuous, stretched and fixed to our Costa Track with screws. We butt the keder edge against the zipper teeth and sew close to the edge of the zipper. The offset from the edge of the keder to the zipper edge is 7/8 inch and is marked on the pattern uniformly above the keder line. ⚓

Mark Hood, MFC, along with his wife, Deb, have owned and operated Hood Canvas LLC in Merrimac, Mass., for the past 40 years. For the last 10 years they have trained students from around the world on quality marine canvas fabrication in their training workshops. www.hoodcanvas.com



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